

In the Claims:

1 1. [previously presented] A method of mobile device control comprising:
2 moving a surrogate under wireless control by a user;
3 during the moving, detecting unsuitable degradation of wireless
4 communications of the wireless control; and
5 in response to the detecting and while the surrogate is still receiving the
6 wireless communications, autonomously moving the surrogate to provide suitable
7 wireless communications of the wireless control.

1 2. [original] The method as claimed in claim 1 additionally comprising:
2 autonomously moving the surrogate along a previously determined route.

1 3. [previously presented] The method as claimed in claim 1 wherein:
2 autonomously moving the surrogate to provide suitable wireless
3 communications of the wireless control occurs after passage of a period of time
4 following the detecting of the degradation; and
5 the method further comprises after the detecting of the unsuitable
6 degradation, the surrogate loitering near a location where the unsuitable degradation
7 was detected during the passage of the period of time.

1 4. [cancelled].

1 5. [previously presented] The method as claimed in claim 1 wherein:
2 moving the surrogate under wireless control includes logging forward motion
3 using at least one of dead reckoning, odometry, directional measurement,
4 differential wheel rotation, or a combination thereof.

1 6. [previously presented] The method as claimed in claim 1 wherein:
2 autonomously moving the surrogate uses logged information of forward
3 movement using at least one of dead reckoning, odometry, directional
4 measurement, differential wheel rotation, or a combination thereof; and
5 autonomously moving the surrogate uses waypoints back along a forward
6 movement path for backtracking movement.

1 7. [previously presented] A method of mobile telepresencing comprising:
2 moving a surrogate under real-time wireless control by a user;
3 autonomously moving the surrogate to an area with adequate wireless
4 coverage to regain wireless control when the wireless control is lost for a period of
5 time; and
6 while the surrogate is autonomously moving, activating a human perceptible
7 indicator which is perceptible to humans in the presence of the surrogate.

1 8. [cancelled].

1 9. [original] The method as claimed in claim 7 wherein:
2 losing wireless control includes degradation of the control to a threshold
3 level;
4 autonomously moving the surrogate to regain wireless control occurs after a
5 period of time.

1 10. [currently amended] The method as claimed in claim 7 wherein:
2 autonomously moving the surrogate includes:
3 backtracking while measuring distance and avoiding collisions by the
4 surrogate;
5 stopping the surrogate for an obstacle; and
6 ~~automatically without user intervention~~ resuming backtracking after removal
7 of the obstacle.

1 11. [cancelled].

1 12. [previously presented] The method as claimed in claim 7 wherein:

2 autonomously moving the surrogate to backtrack uses logged information of
3 forward movement using at least one of dead reckoning, odometry, directional
4 measurement, differential wheel rotation, or a combination thereof;

5 autonomously moving the surrogate to backtrack uses a slower speed than
6 forward speed; and

7 autonomously moving the surrogate uses waypoints back along a forward
8 movement path for backtracking movement considering the slower speed of
9 backtracking.

1 13. [currently amended] A mobile device control system comprising:

2 a surrogate movable under wireless control by a user; and

3 a computer/transceiver system on the surrogate for ~~detecting loss of the~~
4 ~~wireless control, configuring the surrogate to loiter for a non-zero amount of time~~
5 ~~following the loss of the wireless control near a location at which the loss of the~~
6 ~~wireless control was detected, monitoring for return of the wireless control during~~
7 ~~the non-zero amount of time, and~~ moving the surrogate to regain wireless control
8 independently of the wireless control after passage of ~~the~~ a non-zero amount of
9 time following ~~the~~ loss of the wireless control.

1 14. [cancelled].

1 15. [previously presented] The system as claimed in claim 13 wherein:

2 the computer/transceiver system for autonomously moving the surrogate to
3 regain wireless control occurs after the surrogate remains stationary for the non-
4 zero amount of time.

1 16. [original] The system as claimed in claim 13 wherein:

2 the computer/transceiver system for autonomously moving the surrogate
3 includes measuring distance and avoiding collisions by the surrogate.

1 17. [cancelled].

1 18. [previously presented] The system as claimed in claim 13 wherein:

2 the computer/transceiver system uses logged information of forward
3 movement using at least one of dead reckoning, odometry, directional
4 measurement, differential wheel rotation, or a combination thereof; and

5 the computer/transceiver system calculates waypoints back along a forward
6 movement path for backtracking movement.

1 19. [currently amended] A mobile telepresencing system comprising:

2 a surrogate movable under wireless control by a user; and

3 a computer/transceiver system for determining when the wireless control is
4 lost and responsive to the determining, autonomously moving the surrogate to an
5 area not currently receiving adequate coverage of the wireless control, but in which
6 the surrogate previously experienced adequate coverage of the wireless control, to
7 regain adequate coverage of the wireless control, ~~and loitering in the area for the~~
8 ~~wireless control to return.~~

1 20. [original] The system as claimed in claim 19 additionally comprising:

2 the computer/transceiver system for autonomously moving the surrogate
3 along at least one of a previously determined route, a distance, a destination, a
4 direction, or a combination thereof.

1 21. [original] The system as claimed in claim 19 wherein:

2 the computer/transceiver system for determining degradation of the
3 wireless control to a threshold level;

4 the computer/transceiver system for autonomously moving the
5 surrogate to regain wireless control occurs after a period of time.

1 22. [currently amended] The system as claimed in claim 19 wherein:

2 the computer/transceiver system for autonomously moving the surrogate
3 includes:

4 backtracking means for measuring distance and avoiding collisions by
5 the surrogate during backtracking;

6 stopping means for stopping the surrogate for an obstacle; and

means for ~~automatically without user intervention~~ resuming backtracking after removal of the obstacle.

23. [cancelled].

24. [previously presented] The system as claimed in claim 19 wherein:
the computer/transceiver system uses logged information of forward movement using at least one of dead reckoning, odometry, directional measurement, differential wheel rotation, or a combination thereof for backtracking;
the computer/transceiver system provides a slower speed than forward speed for backtracking by the surrogate; and
the computer/transceiver system uses waypoints back along a forward movement path for backtracking movement considering the slower speed of backtracking.

25. [previously presented] The method as claimed in claim 1 wherein:
the detecting comprises comparing a performance parameter associated with the wireless communications with a threshold.

26. [previously presented] The method as claimed in claim 25 wherein:
the detecting comprises determining that a current non-zero data rate at which the surrogate is successfully transmitting data via the wireless communications is less than a desired data rate.

27. [previously presented] The method as claimed in claim 26 further comprising:
prior to the detecting, wirelessly transmitting a video signal at or above the desired rate from the surrogate to the user.

1 28. [previously presented] The method as claimed in claim 10 further
2 comprising:

3 prior to the resuming of the backtracking, sensing removal of the obstacle;
4 and

5 wherein the resuming is responsive to the sensing.

1 29. [previously presented] The method as claimed in claim 25 wherein the
2 detecting comprises determining that a current transmission delay associated with
3 packets received by the surrogate is greater than an acceptable transmission delay.

1 30. [previously presented] The system of claim 13 wherein the
2 computer/transceiver system is configured to configure the surrogate to remain
3 stationary near the location for the non-zero amount of time following the loss of
4 the wireless control.

1 31. [previously presented] The method of claim 7 wherein the surrogate
2 comprises the human perceptible indicator.

1 32. [new] The system of claim 13 wherein the computer/transceiver
2 system is configured to detect loss of the wireless control, configure the surrogate
3 to loiter for the non-zero amount of time following the loss of the wireless control
4 near a location at which the loss of the wireless control was detected, and monitor
5 for return of the wireless control during the non-zero amount of time.

1 33. [new] The system of claim 19 wherein the computer/transceiver
2 system is configured to loiter in the area for the wireless control to return.

1 34. [new] The method of claim 10 wherein the resuming backtracking
2 comprises automatically without user intervention resuming backtracking.

1 35. [new] The system of claim 22 wherein the means for resuming
2 backtracking after removal of the obstacle comprises means for automatically
3 without user intervention resuming backtracking after removal of the obstacle.